STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 191553

TO: Rei-Tsang Shiao **Location: REM/5A10/5C18** **Art Unit: 1626** **Wednesday, June 21, 2006** **Case Serial Number: 10/810404**	**From: Barb O'Bryen** **Location: Biotech-Chem Library** **Remsen 1a69** **Phone: 571-272-2518** **barbara.obryen@uspto.gov**

Search Notes

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

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Mary Hale, Information Branch Supervisor
571-272-2507 Remsen E01 D86

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

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ACCESS DB # 191553

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Robert (Reiton) Shiao Examiner #: 79521 Date: 5/30/06

Art Unit: 1626 Phone Number: 2-0707 Serial Number: 10/810,424

Location (Bldg/Room#): REM (Mailbox #): 5A10/5C18 Results Format Preferred (circle): PAPER DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Alkoxylated phosphite

Inventors (please provide full names): Patzig

Earliest Priority Date: _____

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

1. Such a compos of the formula II) (see ~~claim 1~~ claim 1, 3, 9,

$(HO[\{CH(R)\}_m O_n]_3 P$

formula (I)

* R is sub
* m is 2-20
n is 1 or 20

2. Such compositions comprg formula (I) with a metal i.e. Ti, Ng, etc

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A composition comprising an alkoxylated phosphite having the formula of $(HO[\{CH(R)\}_mO]_n)_3P$ wherein each R is independently hydrogen, an alkyl group, or combinations of two or more thereof; m is a number from 2 to about 20; and n is a number from about 1 to about 20; and an organic titanium compound.

2. (Canceled)

3. (Currently amended) A composition according to claim ~~2~~ 1 wherein said alkoxylated phosphite ~~composition~~ is tri-(ethyleneglycol) phosphite, tri(propylene glycol) phosphite; tri(isopropylene glycol) phosphite; tri(1,4-butylene glycol) phosphite; tri(-isobutylene glycol) phosphite; tri(pentylene glycol) phosphite; tri(hexylene glycol) phosphite; tri(octylene glycol) phosphite, tri(nonylene glycol) phosphite, tri (diethylene glycol) phosphite, tri(triethylene glycol) phosphite, tri(polyethylene glycol)phosphite, tri(polypropylene glycol) phosphite, tri(polybutylene glycol) phosphite; or combinations of two or more thereof.

4. (Currently amended) A composition according to claim 3 wherein said alkoxylated phosphite ~~composition~~ is tri-(~~ethlycne~~ ethylene glycol) phosphite.

5. (Canceled)

6. (Currently amended) A composition according to claim ~~5~~ 3 wherein said composition further comprise~~sing~~ a complexing agent, which is a hydroxycarboxylic acid, an alkanolamine, an aminocarboxylic acid, or combinations of two or more thereof.

7. (Currently amended) A composition according to claim 6 wherein said composition further comprise~~sing~~ a hypophosphorous acid, its salt, or both.

8. (Currently amended) A composition according to claim 6 wherein said ~~titanium or a~~ titanium compound is tetra isopropyl titanate, tetra n-butyl titanate, or combinations thereof.

9. (Currently amended) A composition according to claim 7 wherein said ~~titanium or a~~ titanium compound is tetra isopropyl titanate, tetra n-butyl titanate, or combinations thereof.

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www.uspto.gov

Bib Data Sheet

CONFIRMATION NO. 1343

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/810,404	03/26/2004 RULE	558	1626	CH2979USNA

APPLICANTS

Donald E. Putzig, Newark, DE;

** CONTINUING DATA **********

** FOREIGN APPLICATIONS **********

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 06/06/2004

		STATE OR	SHEETS	TOTAL	INDEPENDENT
Foreign Priority claimed	☐ yes ☐ no	COUNTRY	DRAWING	CLAIMS	CLAIMS
35 USC 119 (a-d) conditions met	☐ yes ☐ no ☐ Met after Allowance	DE	0	40	3
Verified and Acknowledged	Examiner's Signature Initials				

ADDRESS
23906
E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON , DE
19805

TITLE
Alkoxylated phosphite ester and process therefor

FILING FEE	FEES: Authority has been given in Paper	☐ All Fees
RECEIVED	No. _____ to charge/credit DEPOSIT ACCOUNT	☐ 1.16 Fees (Filing)
1130	No. _____ for following:	☐ 1.17 Fees (Processing Ext. of time)
		☐ 1.18 Fees (Issue)

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=> fil reg; d stat que l21
FILE 'REGISTRY' ENTERED AT 11:23:39 ON 21 JUN 2006
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STRUCTURE FILE UPDATES:   20 JUN 2006  HIGHEST RN 888507-19-5
DICTIONARY FILE UPDATES:  20 JUN 2006  HIGHEST RN 888507-19-5

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
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experimental property data in the original document.  For information
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http://www.cas.org/ONLINE/UG/regprops.html

L13             STR

     7
     OH
     |
HO---P---OH
 1   2   3

NODE ATTRIBUTES:
CONNECT IS E3  RC AT   2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
L14             STR
```

Search done looking for structures of L13 & L14 in same record

```
HO—Ak—OH
 4   5   6

NODE ATTRIBUTES:
CONNECT IS E2  RC AT   5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M2 C  AT   5

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   3

STEREO ATTRIBUTES: NONE
L19         150 SEA FILE=REGISTRY FAM FUL L13
L21           9 SEA FILE=REGISTRY SUB=L19 SSS FUL L14

100.0% PROCESSED      150 ITERATIONS  (     1 INCOMPLETE)        9 ANSWERS
SEARCH TIME: 00.00.01


=> fil capl; d que nos l33
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FILE LAST UPDATED: 20 Jun 2006  (20060620/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE


L13             STR
L14             STR
L19         150 SEA FILE=REGISTRY FAM FUL L13
L21           9 SEA FILE=REGISTRY SUB=L19 SSS FUL L14
L32           8 SEA FILE=REGISTRY ABB=ON  L21/COMPLETE
L33          14 SEA FILE=CAPLUS ABB=ON  L32


=> d ibib ed abs hitstr l33 1-14
```

L33 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1050944 CAPLUS
DOCUMENT NUMBER: 143:347945
TITLE: Alkoxylated phosphite ester stabilizer for polyester composition and preparation
INVENTOR(S): Putzig, Donald E.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

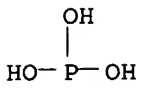
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005215809	A1	20050929	US 2004-810404	20040326
WO 2005097810	A1	20051020	WO 2005-US9289	20050321

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-810404 A 20040326
OTHER SOURCE(S): MARPAT 143:347945
ED Entered STN: 30 Sep 2005
AB The composition comprises an alkoxylated phosphite ester (HO[{CH(R)}mO]n)3P in which each R = H or an alkyl group, or combinations of ≥2 of these groups and m,n = .apprx.2-20. The process comprises contacting a trialkyl phosphite with an alkylene glycol or polyalkylene glycol to produce a mixture followed by heating the mixture Also use comprises contacting a carbonyl compound, in the presence of the above composition, with an alc. to produce polyester. A very low color value is obtained for poly(ethylene terephthalate) production in the presence of Tyzor LA catalyst and stabilizer tri(ethylene glycol)phosphite (e.g., preparation given).
IT **93481-28-8 865762-95-4**
RL: MOA (Modifier or additive use); USES (Uses)
(alkoxylated phosphite ester stabilizer for polyester manufacture)
RN 93481-28-8 CAPLUS
CN 1,2-Propanediol, phosphite (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 57-55-6
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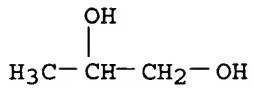

RN 865762-95-4 CAPLUS
CN 1,2-Propanediol, 2-methyl-, phosphite (3:1) (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
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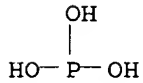

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CRN 558-43-0
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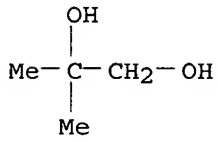


L33 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:66770 CAPLUS
DOCUMENT NUMBER: 136:121064
TITLE: Nonaqueous electrolyte lithium secondary battery
INVENTOR(S): Iwamoto, Kazuyu; Oura, Takafumi; Hatazaki, Makino; Yoshizawa, Hiroshi; Sonoda, Kumiko; Nakanishi, Shinji
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1174940	A1	20020123	EP 2001-117048	20010712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002033119	A2	20020131	JP 2000-215518	20000717

JP 2002033120	A2	20020131	JP 2000-215519		20000717
JP 2002033124	A2	20020131	JP 2000-215520		20000717
US 2002039677	A1	20020404	US 2001-901130		20010710
US 6958198	B2	20051025			
CN 1333580	A	20020130	CN 2001-123135		20010717
PRIORITY APPLN. INFO.:			JP 2000-215518	A	20000717
			JP 2000-215519	A	20000717
			JP 2000-215520	A	20000717

ED Entered STN: 24 Jan 2002

AB The invention relates to a nonaq. electrochem. apparatus in which the difference (γl-γse) between the surface tension γl of nonaq. electrolyte and the surface free energy γse of electrode is not more than 10 dynes/cm. The nonaq. electrolyte contains a F-containing surface active agent.

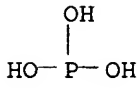
IT **37228-47-0**, Ethylene phosphite
RL: MOA (Modifier or additive use); USES (Uses)
(nonaq. electrolyte lithium secondary battery)

RN 37228-47-0 CAPLUS

CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
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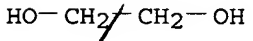


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:472825 CAPLUS
DOCUMENT NUMBER: 135:62153
TITLE: Polyester composition with improved heat-up properties
INVENTOR(S): Massey, Freddie; Deisz, George; Rollick, Kevin; Tung, William
PATENT ASSIGNEE(S): M & G Polymers USA, LLC, USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001046306 A1 20010628 WO 2000-US34835 20001220
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2003018115 A1 20030123 US 2000-736817 20001214
US 6660792 B2 20031209
CA 2395252 AA 20010628 CA 2000-2395252 20001220
EP 1280851 A1 20030205 EP 2000-993519 20001220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003518182 T2 20030603 JP 2001-547210 20001220
PRIORITY APPLN. INFO.: US 1999-172819P P 19991221
WO 2000-US34835 W 20001220

ED Entered STN: 29 Jun 2001

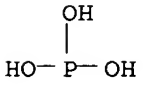
AB A thermoplastic composition, such as PET, contains an inert iron compound, such as FeP, FeSi, or combinations thereof, having no chemical activity in the PET, with or without certain quantities of elemental metals, such as antimony, and a reducing agent or other stabilizer such as phosphite or phosphoric acid. The composition may also optionally contain a color stabilizer, a DEG inhibitor, and stress crack inhibiting agents. The composition has a reduced heat-up time preform before being blown into containers.

IT **37228-47-0**, Ethylene glycol phosphite
RL: MOA (Modifier or additive use); USES (Uses)
(polyester composition with improved heat-up properties)

RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
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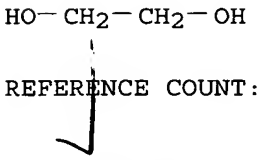


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:586581 CAPLUS

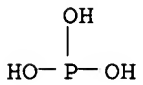
DOCUMENT NUMBER: 113:186581
TITLE: Antimicrobial solution comprising organophosphorus compounds, for polymers
INVENTOR(S): Rei, Nuno M.
PATENT ASSIGNEE(S): Morton Thiokol, Inc., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4933011	A	19900612	US 1983-560761	19831212
PRIORITY APPLN. INFO.:			US 1983-560761	19831212

OTHER SOURCE(S): MARPAT 113:186581
ED Entered STN: 23 Nov 1990
AB Solns. of sulfonylethylene, isoindoledicarboximide or Zn hydroxypyridinethioate derivative in organic phosphites or phosphonates, are microbicides for polymers. The solns. are used in conjunction with plasticizers. A mixture of 2,3,5,6-tetrachloro-4-(methylsulfonyl)pyridine 15, poly(dipropylene glycol)phenyl phosphite 35, dioctyl phthalate 50% by weight was incorporated into a polymer.
IT **129899-52-1**
RL: BIOL (Biological study)
(microbicidal composition containing, for polymers)
RN 129899-52-1 CAPLUS
CN 1,3-Pentanediol, 2,2,4-trimethyl-, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 144-19-4
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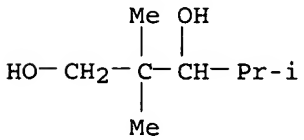


L33 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:592961 CAPLUS
DOCUMENT NUMBER: 105:192961
TITLE: Vinyl polymer coatings with high pigment

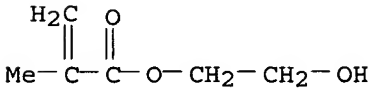
dispersibility
INVENTOR(S): Kumada, Hajime; Maruyama, Kazuyoshi
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61023652	A2	19860201	JP 1984-142297	19840711
JP 07078195	B4	19950823		

PRIORITY APPLN. INFO.: JP 1984-142297 19840711
ED Entered STN: 28 Nov 1986
AB A vinyl polymer with polydispersity 2-25, exhibiting good pigment dispersibility when used as a coating material, is prepared from an amido group-containing vinyl monomer 0.05-10, a P-containing vinyl monomer 0-5, on unsatd. group-containing polyester 0.1-40, and other vinyl monomers 45-99.85%. A mixture of 50.1% PhMe solution of an oil-modified unsatd. polyester from dehydrated castor oil 382, maleic anhydride 5, phthalic anhydride 349, neopentyl glycol 134, trimethylolpropane 98, and pentaerythritol 100 parts 100, styrene 300, Me methacrylate 200, diacetoneacrylamide 10, Bu methacrylate 100, Bu acrylate 180, 2-hydroxyethyl methacrylate 150, methacrylic acid 8, and 2-methacryloyloxyethyl acid phosphate 2 parts in 300 parts PhMe and 400 parts BuOAc was polymerized in the presence of a peroxide initiators at 110° to give a 50.1% polymer solution with Gardner viscosity U, acid value 3.0, OH value 38, and polydispersity 8.2. A coating composition comprising 100 parts this polymer, 10% Neo-Spectra Mark II, and 40 parts 1:1 xylene-BuOAc mixture exhibited good pigment dispersibility and gave a layer with high gloss.
IT **105062-61-1P**
RL: PREP (Preparation)
(manufacture of, for glossy coatings containing highly dispersed pigments)
RN 105062-61-1 CAPLUS
CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-bis(hydroxymethyl)-1,3-propanediol, 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, ethyl 2-propenoate, 2,5-furandione, hexanedioic acid, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate phosphite, methyl 2-methyl-2-propenoate, 2-methyl-2-propenamide and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

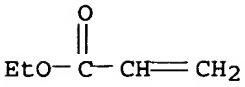
CM 1

CRN 868-77-9
CMF C6 H10 O3



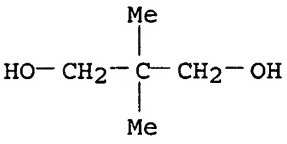
CM 2

CRN 140-88-5
CMF C5 H8 O2



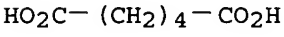
CM 3

CRN 126-30-7
CMF C5 H12 O2



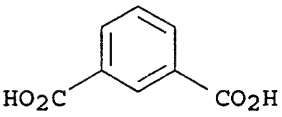
CM 4

CRN 124-04-9
CMF C6 H10 O4



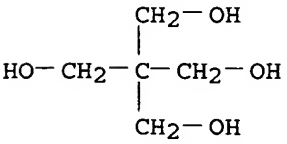
CM 5

CRN 121-91-5
CMF C8 H6 O4



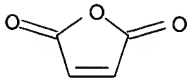
CM 6

CRN 115-77-5
CMF C5 H12 O4



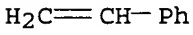
CM 7

CRN 108-31-6
CMF C4 H2 O3



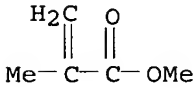
CM 8

CRN 100-42-5
CMF C8 H8



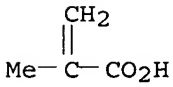
CM 9

CRN 80-62-6
CMF C5 H8 O2



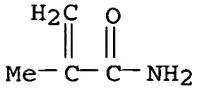
CM 10

CRN 79-41-4
CMF C4 H6 O2



CM 11

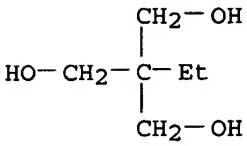
CRN 79-39-0
CMF C4 H7 N O



CM 12

CRN 77-99-6

CMF C6 H14 O3

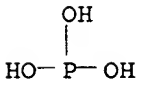


CM 13

CRN 104492-17-3
CMF C6 H10 O3 . x H3 O3 P

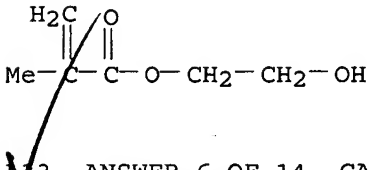
CM 14

CRN 10294-56-1
CMF H3 O3 P



CM 15

CRN 868-77-9
CMF C6 H10 O3



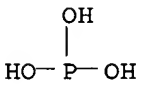
L23 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:19616 CAPLUS
DOCUMENT NUMBER: 102:19616
TITLE: Stabilized 2-mercaptopyridene-1-oxide and derivatives
INVENTOR(S): Hill, Nicholas J.
PATENT ASSIGNEE(S): Excalibur, Inc., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4474760	A	19841002	US 1983-506764	19830622
AU 8429565	A1	19850103	AU 1984-29565	19840620
BR 8403032	A	19850528	BR 1984-3032	19840620
DK 8403029	A	19841223	DK 1984-3029	19840621
NL 8401969	A	19850116	NL 1984-1969	19840621

JP 60013705 A2 19850124 JP 1984-126589 19840621
EP 132301 A1 19850130 EP 1984-304207 19840621
R: BE, DE, FR, GB, IT, SE
ZA 8404699 A 19850529 ZA 1984-4699 19840621
PRIORITY APPLN. INFO.: US 1983-506764 A 19830622
OTHER SOURCE(S): MARPAT 102:19616
ED Entered STN: 26 Jan 1985
AB Organophosphorus compds., i.e., phosphites and glycol phosphonates, and benzothiazole derivs. act together to stabilize mercaptopyridene microbicides against degradation in a polymer system and discoloration of the polymer. Thus, a plastisol composition containing 0.2 weight% Zn 2-mercaptopyridine-1-oxide (I) [13463-41-7], 0.2 weight% poly(dipropylene glycol)phenyl phosphite [93793-60-3], and 0.2 weight% 2-(2'-hydroxy-5'-methylphenyl)benzotriazole [2440-22-4] did not discolor or loose fungicidal activity following treatment by heat (60 min, 350 °F) and (or) UV light (100, 200 h), whereas a plastisol composition containing only 0.2 weight% I exhibited brown and orange discolorations and a loss of fungicidal activity. Stabilized mercaptopyridines are compatible with polymer systems based on PVC [9002-86-2], vinyl chloride-vinyl acetate copolymer, ethylene vinyl acetate, polyethylene, polypropylene, acrylonitrile-butadiene-styrene, and polyethane.
IT **93793-52-3**
RL: BIOL (Biological study)
(mercaptopyridenes stabilization by, in microbicidal polymer compns.)
RN 93793-52-3 CAPLUS
CN Phosphorous acid, phenyl ester, ester with 2,2-dimethyl-1,3-propanediol (9CI) (CA INDEX NAME)

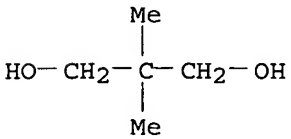
CM 1

CRN 10294-56-1
CMF H3 O3 P



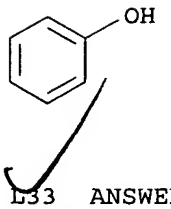
CM 2

CRN 126-30-7
CMF C5 H12 O2



CM 3

CRN 108-95-2
CMF C6 H6 O



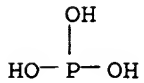
L33 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:480761 CAPLUS
DOCUMENT NUMBER: 101:80761
TITLE: Alkaline bath for bright copper plating
INVENTOR(S): Kaminski, Jan; Jeczmien, Ryszard; Szczepaniak, Stanislaw
PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.
SOURCE: Pol., 3 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 122817	B2	19820831	PL 1980-228279	19801203
PRIORITY APPLN. INFO.:			PL 1980-228279	19801203

ED Entered STN: 01 Sep 1984
AB A bath for Cu plating contains 1-hydroxyethane-1,1-diphosphonic acid, Cu salts, and KOH as well as 0.001-0.1 g/L of polyoxyethylated quaternary ammonium compound [RN[(C2H4O)nH]X[(C2H4O)mH]]+Y-, (R = fatty acid radical; X = Me, Et; Y = Cl, Br, I, or OH; 2 ≤ n + m < 30); 0.001-0.5 g/L of polyhydric alcs. phosphates and/or the product of reaction of H3PO4 with 1-chloro-2,3-epoxypropane; and 0.0005-0.3 g/L of 2-mercaptobenzothiazole and/or its derivs.
IT **37228-47-0**
RL: PRP (Properties)
(in electroplating, of bright copper)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
CMF C2 H6 O2

HO—CH_2—CH_2—OH

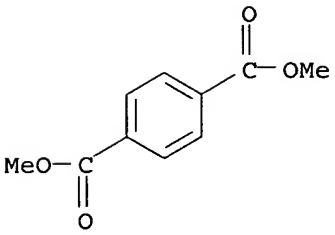
L33 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1980:147902 CAPLUS
DOCUMENT NUMBER: 92:147902
TITLE: Fiber-forming poly(ethylene terephthalate) composition of a white color and increased high-temperature resistance
INVENTOR(S): Tybora, Zenon; Chodkowski, Edward; Michalski, Andrzej; Gorka, Jan; Grzeskowiak, Eugeniusz; Gotowt, Boleslaw; Wilczek, Arkadiusz
PATENT ASSIGNEE(S): Instytut Wlokien Chemicznych, Pol.
SOURCE: Pol., 2 pp.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 98134	P	19790410	PL 1975-180272	19750508

PRIORITY APPLN. INFO.: PL 1975-180272 19750508
ED Entered STN: 12 May 1984
AB White, fiber-forming poly(ethylene terephthalate) [25038-59-9] of improved resistance to high temps. is prepared by addition to the reaction mixture during or after polycondensation of phosphates or phosphites of ethylene glycol (I), or their mixture, in the amount ≤1.5% with respect to terephthalic acid or di-Me terephthalate (II) and conducting the ester exchange and polycondensation in the presence of catalysts. Thus, ester exchange between 1358 g II and 900 g I in the presence of 0.68 g Mn and Ca acetates was conducted until ≥90% theor. MeOH was produced. Then TiO2 6.8, ethylene glycol phosphate 0.34, and Sb2O3 0.68 g were added, and the polycondensation was continued at 285° (0.5 mm Hg) for 80 min with removal of the generated I. The resulting polymer [73261-15-1] had whiteness 49.1, brightness 61.0, softening temperature 263.5°, and during thermogravimetric anal. it lost 1% of its weight after 90 min.
IT **73261-13-9P 73261-14-0P**
RL: PREP (Preparation)
(preparation of fiber-forming, white, heat-resistant)
RN 73261-13-9 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with 1,2-ethanediol and 1,2-ethanediol phosphite (9CI) (CA INDEX NAME)

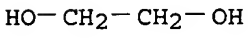
CM 1

CRN 120-61-6
CMF C10 H10 O4



CM 2

CRN 107-21-1
CMF C2 H6 O2

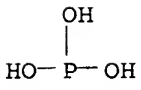


CM 3

CRN 37228-47-0
CMF C2 H6 O2 . x H3 O3 P

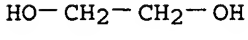
CM 4

CRN 10294-56-1
CMF H3 O3 P



CM 5

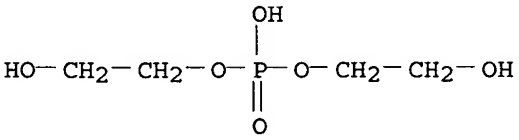
CRN 107-21-1
CMF C2 H6 O2



RN 73261-14-0 CAPLUS
CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with bis(2-hydroxyethyl) hydrogen phosphate, 1,2-ethanediol and 1,2-ethanediol phosphite (9CI) (CA INDEX NAME)

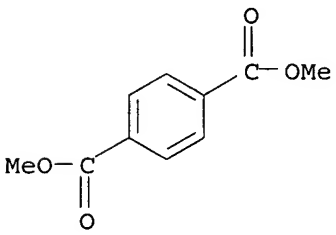
CM 1

CRN 18924-97-5
CMF C4 H11 O6 P



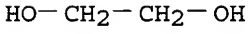
CM 2

CRN 120-61-6
CMF C10 H10 O4



CM 3

CRN 107-21-1
CMF C2 H6 O2

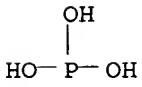


CM 4

CRN 37228-47-0
CMF C2 H6 O2 . x H3 O3 P

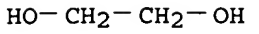
CM 5

CRN 10294-56-1
CMF H3 O3 P



CM 6

CRN 107-21-1
CMF C2 H6 O2



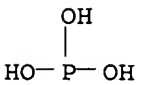
L33 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:506273 CAPLUS
DOCUMENT NUMBER: 81:106273
TITLE: Method for producing polyesters
INVENTOR(S): Chimura, Kazuya; Ito, Kazuo; Takashima, Shunichi; Shindo, Masao; Kawashima, Masao
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 6 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48037760	B4	19731113	JP 1969-72241	19690911

PRIORITY APPLN. INFO.: JP 1969-72241 19690911
ED Entered STN: 12 May 1984
AB The addition of ethylene glycol phosphate [52012-13-2] or ethylene glycol phosphite [**37228-47-0**] to the reaction mixts. in the manufacture of poly(ethylene terephthalate) [25038-59-9] or its copolyesters using Mn compds. and Ge compds. as ester interchange and polymerization catalysts, resp., prevented ether bond formation and the escape by volatilization of the Ge compound from the system which previously made the reaction rate variable and uncontrollable. Bright transparent products were obtained when the atomic ratio of P to Mn and P to Ge were 3:6 and 0.5:1.7, resp. Germanium oxide [1310-53-8] and Mn salts of organic or inorg. acids were the preferred catalysts.
IT **37228-47-0**
RL: USES (Uses)
(stabilizer, for polyester manufacture in presence of manganese and germanium compound catalysts)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
CMF C2 H6 O2

HO—CH_2—CH_2—OH

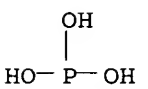
L33 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:506272 CAPLUS
DOCUMENT NUMBER: 81:106272
TITLE: Method for producing polyesters
INVENTOR(S): Chimura, Kazuya; Ito, Kazuo; Takashima, Shunichi; Shindo, Masao; Kawashima, Masao
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 6 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48037759	B4	19731113	JP 1969-72240	19690911

PRIORITY APPLN. INFO.: JP 1969-72240 19690911
ED Entered STN: 12 May 1984
AB The yellowness and ether bond formation normally occurring in the manufacture of poly(ethylene terephthalate) [25038-59-9] or copolyesters using Mg compds. as ester interchange catalysts and Ge compds. as polymerization catalysts was eliminated by addition of ethylene glycol phosphate [52012-13-2] or ethylene glycol phosphite [**37228-47-0**], thereby producing a product with good brightness and transparency. Magnesium acetate [142-72-3] and germanium oxide [1310-53-8] were the preferred catalysts and the atomic ratios of P to Mg and P to Ge were 1.0:5.0 and 0.5:1.7, resp.
IT **37228-47-0**
RL: USES (Uses)
(stabilizers, in polyester manufacture in presence of germanium and magnesium compound)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
CMF C2 H6 O2

HO—CH_2—CH_2—OH

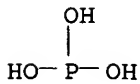
L33 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:426206 CAPLUS
DOCUMENT NUMBER: 81:26206
TITLE: Polyesters
INVENTOR(S): Chimura, Kazuchika; Ito, Kazuo; Takashima, Shunichi; Shindo, Tamao; Kawashima, Masao
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 5 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48032194	B4	19731004	JP 1969-76915	19690929

PRIORITY APPLN. INFO.: JP 1969-76915 19690929
ED Entered STN: 12 May 1984
AB A polyester with min. polyether links is prepared by transesterifying dimethyl terephthalate (I), alone or in combination with dimethyl isophthalate, with ethylene glycol (II) in the presence of calcium acetate [62-54-4] or calcium acetylacetonate [51938-29-5] as transesterification catalyst, and polymerizing the product obtained with germanium dioxide [1310-53-8] as polymerization catalyst in the presence of II esters of H3PO4 or H3PO3 (P/Ca ratio = 0.5-5.0, P/Ge ratio = 0.5-1.7). Thus, I 1940, II 1500, and CaOAc 0.97 part were mixed at 145.deg. and the mixt was heated 3 hr at 145-220.deg., 45 min at 220-43.deg. and treated with 15.7 parts H3PO4 II ester (P/Ca = 1.02, P/Ge = 1.0) (obtained by heating 50 parts trimethyl phosphate [512-56-1] and 1000 parts II at 175.deg.) and 0.584 parts GeO2. The whole mixt was heated 1 hr at 243-85.deg. and .sim.2 hr at 285.deg./2 mm to give transparent colorless poly(ethylene terephthalate) [25038-59-9] containing 0.78 wt % diethylene glycol units, compared with 1.38 weight % when the P ester was omitted.
IT **37228-47-0**
RL: USES (Uses)
(polyester manufacture in presence of, to reduce polyether unit content)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1
CMF C2 H6 O2

HO—CH_2—CH_2—OH

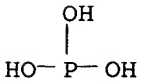
L33 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1972:476427 CAPLUS
DOCUMENT NUMBER: 77:76427
TITLE: Fiber-forming polymeric substances for tires
INVENTOR(S): Alexander, William; Cropp, Donald Thomas; Hartley, Graham Harry
PATENT ASSIGNEE(S): Fiber Industries, Inc.
SOURCE: Ger. Offen., 40 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2154504		19720510	DE 1971-2154504	19711102
CA 990433			CA	
FR 2112401			FR	
GB 1363935			GB	
PRIORITY APPLN. INFO.:			US 1970-86299	19701102

ED Entered STN: 12 May 1984
AB The strength and serviceability of poly(ethylene terephthalate)(I) cord in tires were improved by addition of 13 organic phosphites to the spinning melt of I (optionally, modified by Ph glycidyl ether) with an intrinsic viscosity (η) of 0.80-1.50 in a 0.2-3.1 atomic ratio of P to metal (from polymerization catalyst) in I. Thus, a 1.6:1 ethylene glycol-terephthalic acid mixture was stirred in a reactor at 250.deg./5.6 kg/cm N until the effluent from the esterification was constant, then with Sb2O3 at 280.deg./1 mm until I of η .geq.0.80 (o-ClC6H4OH, 25.deg.) was obtained. The above prepared I was melt spun with bis(2-ethylhexyl) hydrogen phosphite [3658-48-8] to give fiber containing 1.33:1 P-Sb atomic ratio which retained 76% strength after heat-aging 8 hr at 176.7.deg. in a rubber vulcanizate.
IT **37228-47-0**
RL: USES (Uses)
(polyester fibers containing, for tire cords)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



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CRN 107-21-1
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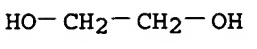


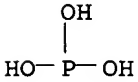
L33 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1962:25901 CAPLUS
DOCUMENT NUMBER: 56:25901
ORIGINAL REFERENCE NO.: 56:4978a-c
TITLE: Polyurethan foams containing primary 2-hydroxyethyl phosphite
INVENTOR(S): Kaplan, Melvin; Koral, Marvin
PATENT ASSIGNEE(S): Allied Chemical Corp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3007884		19611107	US 1959-819243	19590610
PRIORITY APPLN. INFO.:			US	19590610

ED Entered STN: 22 Apr 2001
AB Addition of primary 2-hydroxyethyl phosphite (I) into mixts. for polyurethan foams imparts fire retardancy while retaining the desirable qualities of the product. The I is chemical bonded by treating with other polymerizable components, giving a high degree of permanency. The acidic nature of I also permits copolymerization of the resin without addition of the usual basic or amine catalysts. Thus, a foam formulation was made from PFR-6 (adipic acid-tris(hydroxymethyl)propane based polyester) 100, Silicone X-521 (siloxane-oxyalkylene block copolymer) 1, I 30, Nacconate 1080H (prepolymer of 100 parts of 80% 2,4,- and 20% 2,6-tolylene diisocyanates, and 10 parts of hexanetriol) 108, and CCl3F 25 parts by weight The foam had a d. of 1.7 lb./cu. ft. and a fire retardancy test of 12 sec. A similar foam prepared without I but containing 30 parts of Culluflex CEF [(ClCH2CH2O)3PO] and 1 part of N-methylmorpholine had a d. of 2.9 and was entirely consumed in the fire-retardancy test.
IT **37228-47-0**, Ethylene glycol, phosphite
(fire-resistant polyurethan foams containing)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



CM 2

CRN 107-21-1

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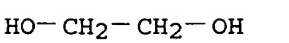


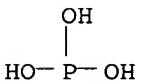
L33 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1961:75762 CAPLUS
DOCUMENT NUMBER: 55:75762
ORIGINAL REFERENCE NO.: 55:14307h-i
TITLE: 2-Hydroxyethyl phosphite
INVENTOR(S): Koral, Marvin
PATENT ASSIGNEE(S): Allied Chemical Corp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2974159		19610307	US 1959-819237	19590610

ED Entered STN: 22 Apr 2001
AB The title compound (I) was prepared as follows: PCl3 1520 was added slowly to a solution of ethylene glycol (II) 2055 in C6H6 1000 parts, with the temperature kept at 10-15°, and the evolved HCl swept out with N. After stirring for further 16 hrs., the C6H6 layer was separated and distilled to remove ethylene chlorohydrin and II. The residue was treated with decolorizing C to yield I (97%).
IT **37228-47-0**, Ethylene glycol, phosphite
(preparation of)
RN 37228-47-0 CAPLUS
CN 1,2-Ethanediol, phosphite (9CI) (CA INDEX NAME)

CM 1

CRN 10294-56-1
CMF H3 O3 P



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CRN 107-21-1
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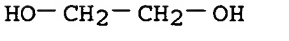

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=> => fil reg; d stat que l10; fil capl; d que nos l29; d que nos l31; d que nos
l53; d que nos l56
FILE 'REGISTRY' ENTERED AT 11:28:20 ON 21 JUN 2006
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DICTIONARY FILE UPDATES:  20 JUN 2006  HIGHEST RN 888507-19-5

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**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

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L5              STR
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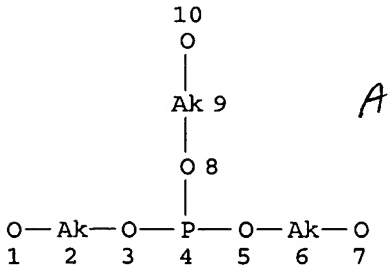

Ak = alkyl; no further substitutions; containing at least 2 carbons

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NODE ATTRIBUTES:
CONNECT IS E2  RC AT   2
CONNECT IS E3  RC AT   4
CONNECT IS E2  RC AT   6
CONNECT IS E2  RC AT   9
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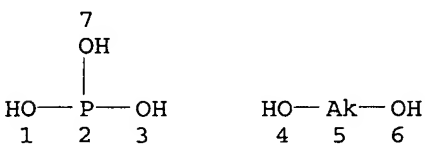
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 2
ECOUNT IS M2 C AT 6
ECOUNT IS M2 C AT 9

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L7 STR



search alone looking for either the structure of L5 or L7

NODE ATTRIBUTES:
CONNECT IS E3 RC AT 2
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 5

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 347561 ITERATIONS (2 INCOMPLETE) 196 ANSWERS
SEARCH TIME: 00.00.09

FILE 'CAPLUS' ENTERED AT 11:28:21 ON 21 JUN 2006
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FILE COVERS 1907 - 21 Jun 2006 VOL 144 ISS 26
FILE LAST UPDATED: 20 Jun 2006 (20060620/ED)

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They are available for your review at:

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http://www.cas.org/infopolicy.html
'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE


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L7              STR
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L13             STR
L14             STR
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L21           9 SEA FILE=REGISTRY SUB=L19 SSS FUL L14
L23         202 SEA FILE=REGISTRY ABB=ON  L10/COMPLETE OR L21/COMPLETE
L24         249 SEA FILE=CAPLUS ABB=ON  L23
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L27           5 SEA FILE=REGISTRY ABB=ON  ("TETRABUTYL TITANATE"/CN OR
                "TETRABUTYL TITANATE DECAMER"/CN OR "TETRABUTYL TITANATE
                DIMER"/CN OR "TETRABUTYL TITANATE POLYMER"/CN OR "TETRABUTYL
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L28       17483 SEA FILE=CAPLUS ABB=ON  (L26 OR L27)
L29           1 SEA FILE=CAPLUS ABB=ON  L24 AND L28


L5              STR
L7              STR
L10         196 SEA FILE=REGISTRY SSS FUL L5 OR L7
L13             STR
L14             STR
L19         150 SEA FILE=REGISTRY FAM FUL L13
L21           9 SEA FILE=REGISTRY SUB=L19 SSS FUL L14
L23         202 SEA FILE=REGISTRY ABB=ON  L10/COMPLETE OR L21/COMPLETE
L24         249 SEA FILE=CAPLUS ABB=ON  L23
L30      560959 SEA FILE=CAPLUS ABB=ON  TITAN?/OBI
L31           4 SEA FILE=CAPLUS ABB=ON  L24 AND L30


L5              STR
L7              STR
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L34         115 SEA FILE=REGISTRY ABB=ON  L10 AND (C H O P/ELF AND 4/ELC.SUB)
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L40     1265404 SEA FILE=CAPLUS ABB=ON  POLYMER#/OBI
L43      953505 SEA FILE=CAPLUS ABB=ON  PLASTICS?/SC,SX
L49     2515689 SEA FILE=CAPLUS ABB=ON  ?METAL?/BI
L53          10 SEA FILE=CAPLUS ABB=ON  (L40 OR L43) AND L35 AND L49


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L5              STR
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L34         115 SEA FILE=REGISTRY ABB=ON  L10 AND (C H O P/ELF AND 4/ELC.SUB)
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L40      1265404 SEA FILE=CAPLUS ABB=ON  POLYMER#/OBI
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L54       124470 SEA FILE=CAPLUS ABB=ON  L2
L56            4 SEA FILE=CAPLUS ABB=ON  (L40 OR L43) AND L35 AND L54


=> s l29,l31,l53,l56 not l33
L57         14 (L29 OR L31 OR L53 OR L56) NOT L33

=> d ibib ed abs hitstr l57 1-14; fil hom

L57  ANSWER 1 OF 14  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2005:1351070  CAPLUS
DOCUMENT NUMBER:          144:89108
TITLE:                    Process for preparation of stabilized filled
                          polyolefins
INVENTOR(S):              Widjanta, I. Made; Callierotti, Corrado
PATENT ASSIGNEE(S):       P.T. Catur Karya Manunggal, Indonesia; Great Lakes
                          Chemical (Europe) GmbH
SOURCE:                   PCT Int. Appl., 30 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2005123822         A1    20051229    WO 2005-GB2366          20050616
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                       GB 2004-13740       A  20040619
ED   Entered STN:  30 Dec 2005
AB   Title process comprises (a) polymerizing olefin monomer(s) to obtain polyolefin
     or copolymer in non-extruded particle/powder form; (b) depositing liquid
     stabilizer mixture of phosphate/phosphonite stabilizer, phenolic antioxidant
     and optionally acid scavenger onto polyolefin particles/powder surface in
     first mixer; (c) compounding 1-30% (based on polyolefin weight) polymer
     filler in second mixer with moist stabilizer coated polyolefin
     particles/powder obtained from (b); the steps (b) and (c) being conducted
     at 50-120° with neither of the first or second mixers being an
     extruder.
IT   36788-39-3, Tris(dipropylene glycol)phosphite
     RL: TEM (Technical or engineered material use); USES (Uses)
        (stabilizer; process for preparation of stabilized filled polyolefins)
RN   36788-39-3  CAPLUS
CN   3,6,8,11-Tetraoxa-7-phosphatridecane-1,13-diol, 7-[2-(2-
     hydroxymethylethoxy)methylethoxy]tetramethyl- (9CI)  (CA INDEX NAME)
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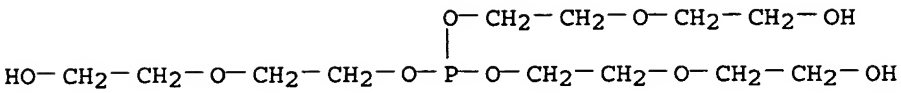
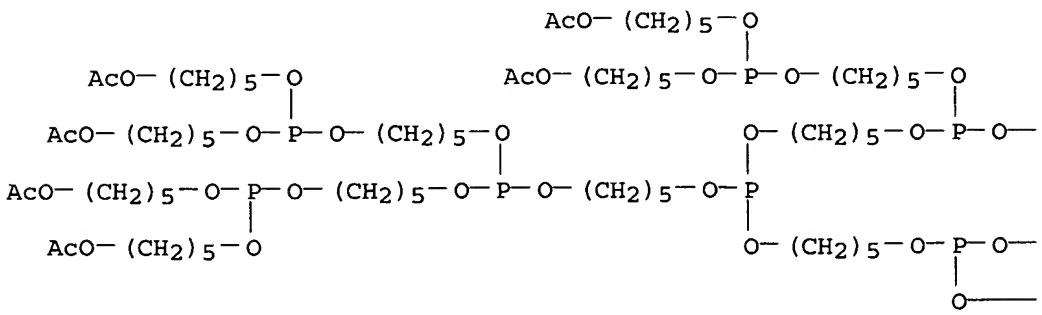


6 (D1—Me)

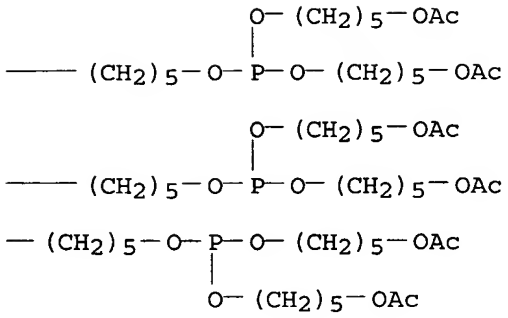
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:363777 CAPLUS
DOCUMENT NUMBER: 139:230851
TITLE: Phosphite dendrimers and their **organometallic** derivatives
AUTHOR(S): Poniatowska, Elzbieta; Salamonczyk, Grzegorz M.
CORPORATE SOURCE: Centre of Molecular and Macromolecular Studies, Department of Heteroorganic Chemistry, The Polish Academy of Sciences, Lodz, 90-363, Pol.
SOURCE: Tetrahedron Letters (2003), 44(23), 4315-4317
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:230851
ED Entered STN: 13 May 2003
AB The synthesis of new classes of dendrimers, boranophosphate triesters and phosphite-based dendrimers has been accomplished. The latter compds. have been successfully transformed into their palladium(II) and rhodium(I) complexes, possessing **metal** derivs. attached to the branching points within the dendrimer.
IT **591247-50-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phosphite dendrimers and their palladium and rhodium complexes)
RN 591247-50-6 CAPLUS
CN Phosphorous acid, phosphinidynetris(oxy-5,1-pentanediyl) hexakis[7-[[5-(acetyloxy)pentyl]oxy]-15-oxo-6,8,14-trioxa-7-phosphahexadec-1-yl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:250396 CAPLUS
DOCUMENT NUMBER: 130:338873
TITLE: Vinyl chloride resin compositions with excellent thermal stability, transparency, and weather resistance
INVENTOR(S): Katsuta, Koji; Noguchi, Katsutoshi; Fujii, Takayuki
PATENT ASSIGNEE(S): Katsuta Kako K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11106586	A2	19990420	JP 1997-306281	19971003
PRIORITY APPLN. INFO.:			JP 1997-306281	19971003

OTHER SOURCE(S): MARPAT 130:338873
ED Entered STN: 23 Apr 1999
AB The compns., useful for agricultural films, contain (A) [Al2(Li1-XMX)2(OH)6]2(SiYO2Y+1).mH2O (M = bivalent **metal**; 0 ≤ m < 5; 0 ≤ X < 1; Y = 2-4), (B) [R2P(O)(OR1)O]2M' and/or R3OP(O)O2M' (R1, R3 = C1-30 alkyl, arylalkyl, aryl, alkylaryl; R2 = H, R4O; R4 = C1-30 alkyl, arylalkyl, aryl, alkylaryl; M' = alkaline earth **metal**, Zn), and (C) organic phosphorous acid compds. The compns. show excellent stability especially when the phosphorous acid compds. having ≥1 OH directly bonded to P are used as (C). Thus, a sheet made from a composition of PVC 100, DOP 45, tricresyl phosphate 5, epoxidized soybean oil 2.0, Zn stearate 0.3, Ba nonylphenate 0.1, Ba stearate 0.2, benzoyl acetylmethane 0.1, methylenebisstearamide 0.5, 1,3,5-trimethyl-2,4,6-tris(3,5-di-tert-butyl-4-hydroxybenzyl)benzene 0.1, bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 0.1, sorbitan monopalmitate 1.5, Al4.0Li2.0(OH)12Si3.0O7.0.3.0H2O 0.5, Ca monododecyl phosphate 0.5, and tridecyl phosphite 0.5 part showed blackening time 115 min at 190° and good transparency and thermal discoloration resistance and weather resistance.

IT **84019-84-1**
RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(vinyl chloride resin compns. with good thermal stability, transparency, discoloration resistance, and weather resistance for agricultural films)
RN 84019-84-1 CAPLUS
CN Phosphorous acid, bis[2-(2-butoxyethoxy)ethyl] 6-oxido-5,7,10,13-tetraoxa-6-phosphaheptadec-1-yl ester (9CI) (CA INDEX NAME)

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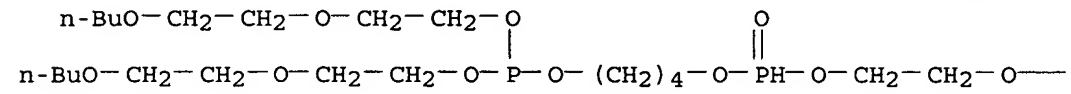

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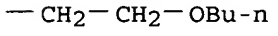

L57 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:250394 CAPLUS
DOCUMENT NUMBER: 130:338872
TITLE: Vinyl chloride resin compositions with excellent thermal stability, transparency, and weather resistance
INVENTOR(S): Katsuta, Koji; Katagiri, Toshio; Fujii, Takayuki
PATENT ASSIGNEE(S): Katsuta Kako K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11106584	A2	19990420	JP 1997-306279	19971003

PRIORITY APPLN. INFO.: JP 1997-306279 19971003
OTHER SOURCE(S): MARPAT 130:338872
ED Entered STN: 23 Apr 1999
AB The compns., useful for agricultural films, contain (A) OP(OR1)(OR2)(OR3) (R1-3 = alkyl, arylalkyl, aryl, monoalkylaryl, at least one of R1-3 is dialkylaryl), (B) phosphorous acid and/or phosphoric acid compds. having ≥1 OH bonded directly to P, and (C) [R5P(O)(OR4)O]2M and/or R6OP(O)O2M (R4, R6 = C1-30 alkyl, arylalkyl, aryl, alkylaryl; R5 = H, R7O; R7 = C1-30 alkyl, arylalkyl, aryl, alkylaryl; M = alkaline earth **metal**, Zn). Thus, a sheet made from a composition of PVC 100, DOP 45, epoxidized soybean oil 2.0, Zn stearate 0.5, Ba nonylphenate 0.2, Ba stearate 0.3, dioctyl monoxylyl phosphate 5.0, (C3H7O)2POH 0.5, and Ba di-Bu phosphate 0.2 part showed blackening time 85 min at 190° and good transparency and thermal discoloration resistance.
IT **84019-84-1**

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(vinyl chloride resin compns. with good thermal stability, transparency, discoloration resistance, and weather resistance for agricultural films)
RN 84019-84-1 CAPLUS
CN Phosphorous acid, bis[2-(2-butoxyethoxy)ethyl] 6-oxido-5,7,10,13-tetraoxa-6-phosphaheptadec-1-yl ester (9CI) (CA INDEX NAME)

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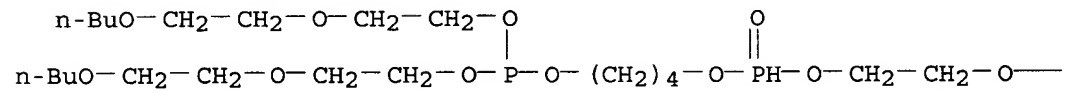

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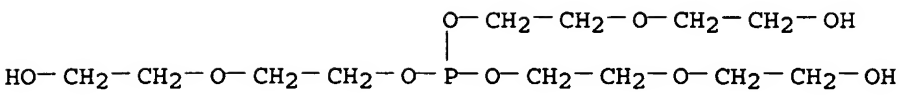
—CH_2—CH_2—OBu-n

L57 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:289876 CAPLUS
DOCUMENT NUMBER: 128:283310
TITLE: Synthesis of phosphite fireproofing agent by transesterification
INVENTOR(S): Liu, Yunxia
PATENT ASSIGNEE(S): Liu, Yunxia, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1139144	A	19970101	CN 1996-104891	19960515

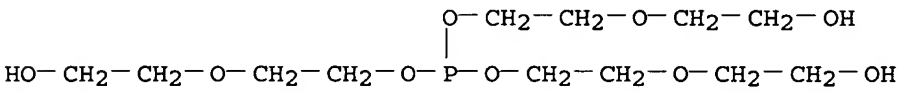
PRIORITY APPLN. INFO.: CN 1996-104891 19960515
ED Entered STN: 20 May 1998
AB The fireproofing agent useful nonwoven fabric, synthetic leather etc. is synthesized by transesterification of a triaryl phosphite with an alc. such as dipropylene glycol using, e.g., Na phenoxide as catalyst. Reaction of tri-Ph phosphite with dipropylene glycol using Na phenoxide as catalyst gave tris(dipropylene glycol) phosphite with 97.7% yield.
IT **17363-77-8P 26702-54-5P 36788-39-3P,**
Tris(dipropylene glycol) phosphite **205876-08-0P**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(synthesis of phosphite fireproofing agent by transesterification)
RN 17363-77-8 CAPLUS
CN 3,6,8,11-Tetraoxa-7-phosphatridecane-1,13-diol, 7-[2-(2-hydroxymethoxy)ethoxy]- (9CI) (CA INDEX NAME)



RN 26702-54-5 CAPLUS
CN 3,6,8,11-Tetraoxa-7-phosphatridecane-1,13-diol, 7-[2-(2-hydroxymethylethoxy)methylethoxy]tetramethyl-, homopolymer (9CI) (CA INDEX NAME)

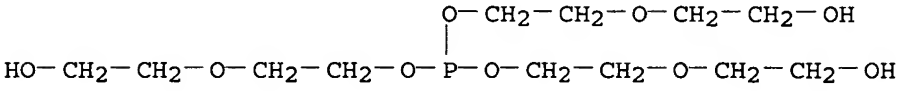
CM 1

CRN 36788-39-3
CMF C18 H39 O9 P
CCI IDS



6 (D1—Me)

RN 36788-39-3 CAPLUS
CN 3,6,8,11-Tetraoxa-7-phosphatridecane-1,13-diol, 7-[2-(2-hydroxymethylethoxy)methylethoxy]tetramethyl- (9CI) (CA INDEX NAME)

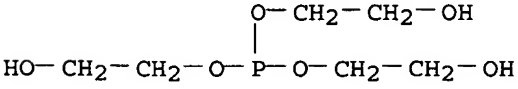


6 (D1—Me)

RN 205876-08-0 CAPLUS
CN 1,2-Ethanediol, phosphite (3:1), homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 761-55-7
CMF C6 H15 O6 P



L57 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:606894 CAPLUS
DOCUMENT NUMBER: 121:206894
TITLE: Polyolefin compositions and blocking-resistant films therefrom

Searched by Barb O'Bryen, STIC 2-2518

INVENTOR(S): Tokutake, Atsuo; Sakuma, Hisao; Shibayama, Motoyuki; Yoshikawa, Toshitsune; Noguchi, Katsutoshi; Sato, Fumio
PATENT ASSIGNEE(S): Nippon Petrochemicals Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06087984	A2	19940329	JP 1992-277630	19920904

PRIORITY APPLN. INFO.: JP 1992-277630 19920904
ED Entered STN: 29 Oct 1994
AB The title compns. with good discoloration and heat resistance and low corrosivity to **metals** contain P compds. (R1O)(R2O)P[OYOP(OR4)]nOR3 (R1-4 = H, hydrocarbyl, O-containing hydrocarbyl; Y = polyol residue, polyhydroxy phenol residue; n = 1-10), hydrotalcites, and blocking preventers and optionally lubricants and antioxidants. A 96:4 ethylene-1-butene copolymer composition contained (C9H19C6H4O)2P[OC3H6OC3H6OP(OC6H4C9H19)]4OC6H4C9H19 0.1, hydrotalcite 0.05, Silton JC30 0.45, and erucamide 0.12%.
IT **40305-86-0**
RL: USES (Uses)
(polyolefin films containing, blocking- and heat- and discoloration-resistant, noncorrosive)
RN 40305-86-0 CAPLUS
CN 3,6,8,11,14,16,19,22,24,27-Decaoxa-7,15,23-triphosphanonacosane-1,29-diol, 7,15,23-tris[2-(2-hydroxymethylethoxy)methylethoxy]octamethyl- (9CI) (CA INDEX NAME)

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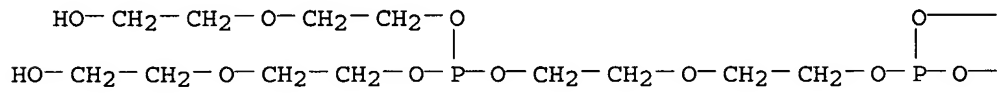

14 (D1—Me)

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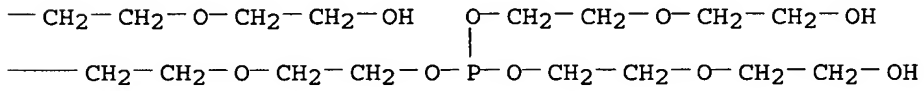

L57 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:165900 CAPLUS
DOCUMENT NUMBER: 120:165900
TITLE: Stabilized polyolefin compositions
INVENTOR(S): Tokutake, Atsuo; Shibayama, Motoyuki; Yoshikawa, Toshitsune; Noguchi, Katsutoshi; Sato, Fumio

PATENT ASSIGNEE(S): Nippon Petrochemicals Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05214175	A2	19930824	JP 1992-62753	19920204

PRIORITY APPLN. INFO.: JP 1992-62753 19920204
OTHER SOURCE(S): MARPAT 120:165900
ED Entered STN: 02 Apr 1994
AB The title compns., showing good stability against light, O, yellowing, and heat and reduced **metal** corrosion, contain (A) ≥1 P compound (R1O)P(OR2)[OYOP(OR4)]lOR3 [I; R1-4 = H, (O-containing) hydrocarbyl; Y = (O-containing) hydrocarbon; l ≥1], (B) hydrotalcites, and optionally (C) fatty acids, their **metal** salts, and/or hydroxy fatty acid **metal** salts and (D) hindered phenol and/or thioether antioxidants. Thus, 1-butene-ethylene copolymer containing 0.1% I (R1-4 = Ph, Y = C3H6, l = 4) and 0.10% hydrotalcite gave a pressed sheet with yellowing index -2.1 and showed torque increase in 16.0 min when kneaded at 210°.
IT **153724-05-1**
RL: USES (Uses)
(stabilizers, against heat and light and discoloration, for polyolefins)
RN 153724-05-1 CAPLUS
CN Poly[oxy[[2-(2-hydroxymethylethoxy)methylethoxy]phosphinidene](methyl-1,2-ethanediyl)oxy(methyl-1,2-ethanediyl)], α-[2-(2-hydroxymethylethoxy)methylethyl]-ω-[[bis[2-(2-hydroxymethylethoxy)methylethoxy]phosphino]oxy]- (9CI) (CA INDEX NAME)

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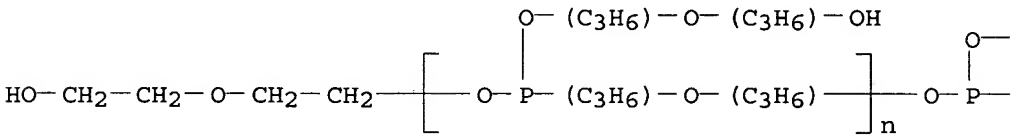

6 (D1—Me)

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—CH_2—CH_2—O—CH_2—CH_2—OH

—O—CH_2—CH_2—O—CH_2—CH_2—OH

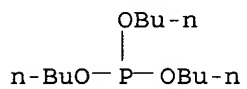
L57 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:200003 CAPLUS
DOCUMENT NUMBER: 112:200003
TITLE: Method for lowering the melt crystallization temperature of an arylene sulfide **polymer**

Searched by Barb O'Bryen, STIC 2-2518

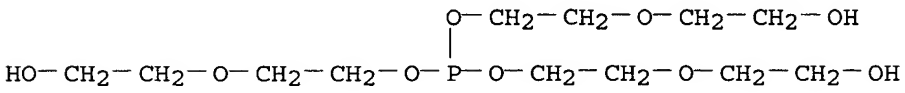
with organic phosphite composition
INVENTOR(S): Liang, Yeon F.
PATENT ASSIGNEE(S): Phillips Petroleum Co., USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4892930	A	19900109	US 1988-226029	19880729

PRIORITY APPLN. INFO.: US 1988-226029 19880729
ED Entered STN: 26 May 1990
AB The melt crystallization temperature (Tmc) of an arylene sulfide polymer is reduced by the addition of an effective amount of organic phosphites. Thus, polyphenylene sulfide (I) containing 1% di-Ph phosite had Tmc 175°, vs. 212, for I alone.
IT **102-85-2**, Tributyl phosphite **36788-39-3**, Tris(dipropylene glycol) phosphite
RL: USES (Uses)
(polythiophenylenes containing, for lowering melt crystallization temperature)
RN 102-85-2 CAPLUS
CN Phosphorous acid, tributyl ester (8CI, 9CI) (CA INDEX NAME)



RN 36788-39-3 CAPLUS
CN 3,6,8,11-Tetraoxa-7-phosphatridecane-1,13-diol, 7-[2-(2-hydroxymethylethoxy)methylethoxy]tetramethyl- (9CI) (CA INDEX NAME)



6 (D1—Me)

L57 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:492144 CAPLUS
DOCUMENT NUMBER: 101:92144
TITLE: Stabilizers for halogen-containing resins
PATENT ASSIGNEE(S): Katsuta Kako Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59038250	A2	19840302	JP 1982-148645	19820827
JP 03048222	B4	19910723		
PRIORITY APPLN. INFO.:			JP 1982-148645	19820827

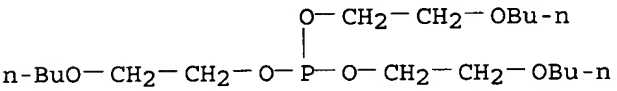
ED Entered STN: 15 Sep 1984

AB Liquid stabilizers contain Zn and alkaline earth **metal** salts of C6-18 organic acids, organic H3PO3 esters, H3PO3 or H3PO4 compds. contg ≥1 P-OH linkage, organotin compds., N-containing compds., and solvents. Thus, a liquid stabilizer was prepared from calcium octoate [6107-56-8] 10, zinc octoate [557-09-5] 10, dibutyltin dilaurate [77-58-7] 2, triisopropanolamine [122-20-3] 0.5, dioctyl phthalate (I) [117-81-7] 11.5, oleyl alc. [143-28-2] Et diglycol [111-90-0] 3, PCOC2H4OEt)(OC2H4OC2H4OEt)(OC2H4OC2H4OBu) (II) [**91433-53-3**] 30, and (C10H21O)2POH (III) [19931-58-9] 30 parts. Sheets were prepared from PVC [9002-86-2] 100, I 50, an epoxidized soybean oil 2.0, barium stearate [6865-35-6] 0.4 zinc stearate [557-05-1] 0.6, and the liquid stabilizer 1.5 parts and had heat stability 65 min at 180°, good transparency, slight discoloration, weather resistance 1300 h, and slight blooming, compared with 60, slight turbidity, discoloration, 850, and bleeding, resp., for sheets using a liquid stabilizers containing 60 parts II and no III.

IT **2718-67-4 4486-47-9 32429-22-4**
82349-74-4 91433-48-6 91433-54-4
RL: USES (Uses)
(liquid stabilizer compns., for PVC)

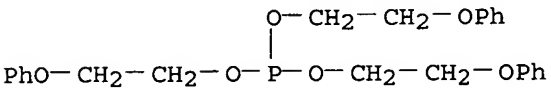
RN 2718-67-4 CAPLUS

CN Ethanol, 2-butoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)



RN 4486-47-9 CAPLUS

CN Ethanol, 2-phenoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)



RN 32429-22-4 CAPLUS

CN Ethanol, 2-[2-[2-(dodecyloxy)ethoxy]ethoxy]-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)

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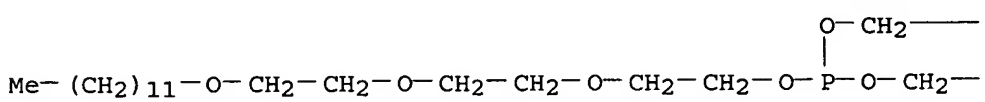

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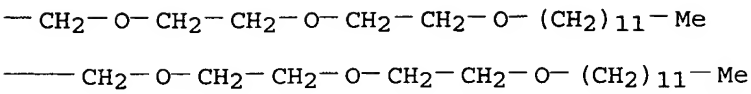
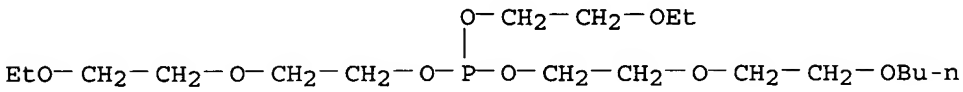
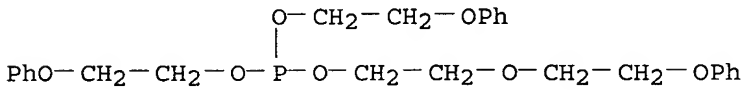


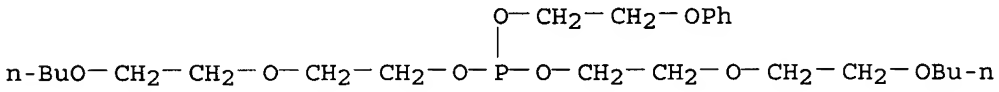
RN 82349-74-4 CAPLUS
CN Phosphorous acid, 2-(2-butoxyethoxy)ethyl 2-(2-ethoxyethoxy)ethyl 2-ethoxyethyl ester (9CI) (CA INDEX NAME)



RN 91433-48-6 CAPLUS
CN Phosphorous acid, 2-(2-phenoxyethoxy)ethyl bis(2-phenoxyethyl) ester (9CI) (CA INDEX NAME)



RN 91433-54-4 CAPLUS
CN Phosphorous acid, bis[2-(2-butoxyethoxy)ethyl] 2-phenoxyethyl ester (9CI) (CA INDEX NAME)

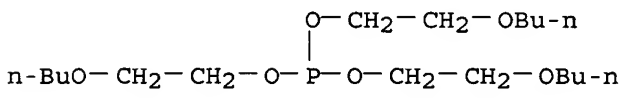


L57 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:53291 CAPLUS
DOCUMENT NUMBER: 96:53291
TITLE: Electrical tree and water tree resistant polymer compositions
INVENTOR(S): Maringer, Melvin F.; Barlow, Anthony
PATENT ASSIGNEE(S): National Distillers and Chemical Corp., USA
SOURCE: U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 58,878.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

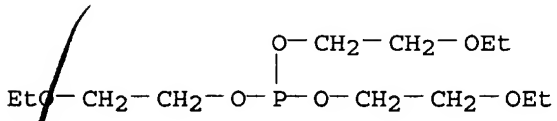
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4299713	A	19811110	US 1980-161932	19800623
CA 1161589	A1	19840131	CA 1980-355215	19800702
AU 8060283	A1	19820128	AU 1980-60283	19800709
AT 8003726	A	19821215	AT 1980-3726	19800717
AT 371830	B	19830810		

BE 884394	A1	19810119	BE 1980-201467		19800718
DK 8003102	A	19810120	DK 1980-3102		19800718
FI 8002284	A	19810120	FI 1980-2284		19800718
NO 8002166	A	19810120	NO 1980-2166		19800718
SE 8005265	A	19810120	SE 1980-5265		19800718
NL 8004164	A	19810121	NL 1980-4164		19800718
BR 8004510	A	19810203	BR 1980-4510		19800718
FR 2461734	A1	19810206	FR 1980-15919		19800718
FR 2461734	B1	19831118			
JP 56020057	A2	19810225	JP 1980-97708		19800718
ES 494311	A1	19810701	ES 1980-494311		19800718
GB 2055854	A	19810311	GB 1980-23773		19800721
GB 2128622	A1	19840502	GB 1982-35065		19821208
GB 2128622	B2	19841031			
PRIORITY APPLN. INFO.:			US 1979-58878	A2	19790719
			GB 1980-23773	A3	19800721

OTHER SOURCE(S): MARPAT 96:53291
ED Entered STN: 12 May 1984
AB Unfilled polymeric elec. insulators for high-voltage transmission have good resistance to elec. and water treeing when organic silanes containing alkoxyalkoxy groups, organic phosphites, or organic Ti compds. are added. Thus,
polyethylene [9002-88-4] samples containing 2% vinyltris(2-methoxyethoxy)silane [1067-53-4] showed no failures after >12,700 min in a double needle test and relative water tree size 0.23 compared with failure of 50% of the samples after 80 min and 1, resp., for a control.
IT **2718-67-4 6199-01-5**
RL: USES (Uses)
(polymeric elec. insulators containing, treeing-resistant)
RN 2718-67-4 CAPLUS
CN Ethanol, 2-butoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)



RN 6199-01-5 CAPLUS
CN Ethanol, 2-ethoxy-, phosphite (3:1) (9CI) (CA INDEX NAME)



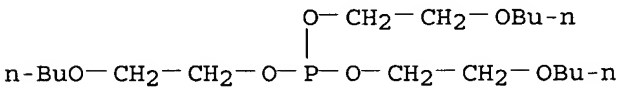
L57 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1981:140721 CAPLUS
DOCUMENT NUMBER: 94:140721
TITLE: **Polymer** compositions with improved resistance to water treeing and electrical treeing and suitable for insulating electrical cables
INVENTOR(S): Maringer, Melvin Frederick; Barlow, Anthony
PATENT ASSIGNEE(S): National Distillers and Chemical Corp., USA
SOURCE: Ger. Offen., 31 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

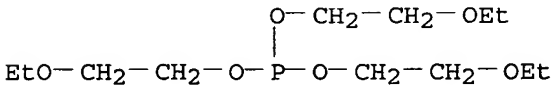
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3026586	A1	19810205	DE 1980-3026586	19800714
CA 1161589	A1	19840131	CA 1980-355215	19800702
AU 8060283	A1	19820128	AU 1980-60283	19800709
AT 8003726	A	19821215	AT 1980-3726	19800717
AT 371830	B	19830810		
BE 884394	A1	19810119	BE 1980-201467	19800718
DK 8003102	A	19810120	DK 1980-3102	19800718
FI 8002284	A	19810120	FI 1980-2284	19800718
NO 8002166	A	19810120	NO 1980-2166	19800718
SE 8005265	A	19810120	SE 1980-5265	19800718
NL 8004164	A	19810121	NL 1980-4164	19800718
BR 8004510	A	19810203	BR 1980-4510	19800718
FR 2461734	A1	19810206	FR 1980-15919	19800718
FR 2461734	B1	19831118		
JP 56020057	A2	19810225	JP 1980-97708	19800718
ES 494311	A1	19810701	ES 1980-494311	19800718
GB 2055854	A	19810311	GB 1980-23773	19800721
GB 2128622	A1	19840502	GB 1982-35065	19821208
GB 2128622	B2	19841031		

PRIORITY APPLN. INFO.: US 1979-58878 A 19790719
GB 1980-23773 A3 19800721

ED Entered STN: 12 May 1984
AB Organic compds. of Si, Sn, Ti, P, or B are treeing inhibitors for polymers such as polyethylene (I) [9002-88-4] as elec. insulators. Thus, I is milled at 149° with 2% (MeOCH2CH2O)3SiCH:CH2 (II) [1067-53-4] to give an elec. insulator resistant to elec. treeing for >12,700 min in an accelerated test, compared with 80 min without II. Water treeing was 23% of that without II.
IT **2718-67-4 6199-01-5**
RL: USES (Uses)
(treeing inhibitors, for polyethylene insulators)
RN 2718-67-4 CAPLUS
CN Ethanol, 2-butoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)



RN 6199-01-5 CAPLUS
CN Ethanol, 2-ethoxy-, phosphite (3:1) (9CI) (CA INDEX NAME)

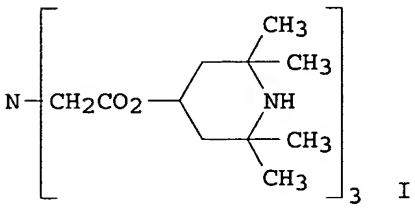


L57 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1979:153036 CAPLUS
DOCUMENT NUMBER: 90:153036
TITLE: Stabilizers for synthetic **polymers** comprising 2,2,6,6,-tetramethyl-4-piperidyl carboxylic

acid ester, a triphosphite, and an acid phosphite or salt
INVENTOR(S): Minagawa, Motonobu; Kubota, Naohiro; Shibata, Toshihiro
PATENT ASSIGNEE(S): Argus Chemical Corp., USA
SOURCE: U.S., 34 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

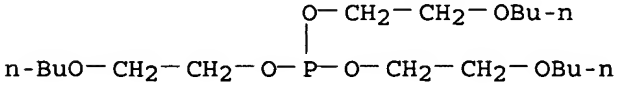
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4110306	A	19780829	US 1976-744053	19761122
JP 52066551	A2	19770602	JP 1975-144357	19751201
JP 53038170	B4	19781013		

PRIORITY APPLN. INFO.: JP 1975-144357 A 19751201
ED Entered STN: 12 May 1984
GI



I

AB Stabilizers for vinyl polymers, polyamides, and polyesters contained triphosphites 10-69.5, acid phosphites or their **metal** salts 0.5-10, and 2,2,6,6-tetramethyl-4-piperidyl carboxylic esters 30-89.5%. Thus, a film prepared from PVC [9002-86-2] 100, DOP 50, Ca stearate 1.0, Zn stearate 0.1, I [64022-57-7] 0.7, tetra(tridecyl) 4,4'-butylidenebis[3-methyl-6-tert-butylphenol] diphosphite [13003-12-8] 1.2, and diphenyl hydrogen phosphite Zn salt [64022-68-0] 0.1 part failed after 940 h in a Weather-Ometer and after 120 min in a forced air oven at 175°, compared with 280 and 45, resp., for a control.
IT **2718-67-4**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(heat and light stabilizers, for **polymers**)
RN 2718-67-4 CAPLUS
CN Ethanol, 2-butoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)

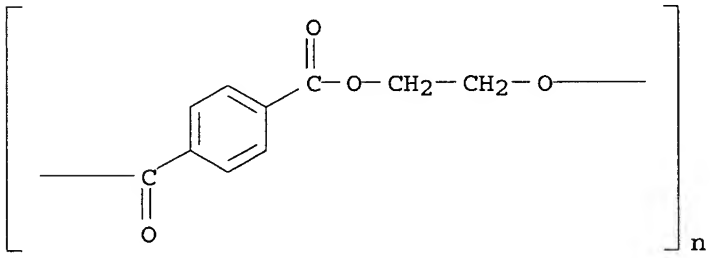


L57 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:527299 CAPLUS
DOCUMENT NUMBER: 79:127299
TITLE: Polyester compositions with permanent antistatic properties
INVENTOR(S): Chimura, Kazuya; Iwata, Hiroshi; Kagawa, Kazunori;

Ishida, Kazuhiko
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd.
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2239466	A1	19730712	DE 1972-2239466	19720810
DE 2239466	B2	19750605		
DE 2239466	C3	19760122		
JP 48068644	A2	19730919	JP 1971-104316	19711222
JP 51044978	B4	19761201		
GB 1408296	A	19751001	GB 1972-38176	19720816
US 3962185	A	19760608	US 1974-495361	19740807
PRIORITY APPLN. INFO.:			JP 1971-104316 A	19711222
			US 1972-277573 A2	19720803

ED Entered STN: 12 May 1984
AB Polyethylene glycol ether-phosphite esters such as I are added to poly(ethylene terephthalate) (II) [**25038-59-9**] to give antistatic polyester fibers and moldings. Thus, the antistatic properties of II fibers containing 2% I increased only slightly (from 2100 V to 2350 V) during 5 launderings with anionic detergent, compared with an increase from 2500 V to 8000 V for II fibers containing 2% [m-MeC6H4O(CH2CH2O)15]3P instead of I.
IT **25038-59-9**, uses and miscellaneous
RL: USES (Uses)
(antistatic agents for, polyethylene glycol phosphites as)
RN 25038-59-9 CAPLUS
CN Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl) (9CI) (CA INDEX NAME)



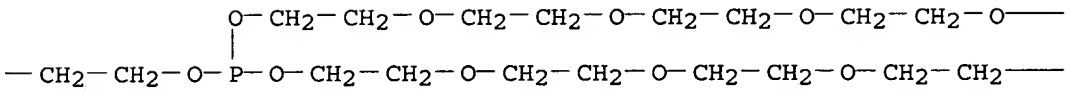
IT **42559-47-7 42605-27-6**
RL: USES (Uses)
(antistatic agents, for poly(ethylene terephthalate))
RN 42559-47-7 CAPLUS
CN Phosphorous acid, methylenebis[phenylene(3,6,9,12-tetraoxatetradecane-14,1-diyl)] tetrakis(3,6,9,12,15-pentaoxaheptacos-1-yl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

1/2 [D1—CH_2—D1]

Me—$(CH_2)_{11}$—O—CH_2—CH_2—O—CH_2—CH_2—O—CH_2—CH_2—O—CH_2—CH_2—O—

PAGE 1-B



PAGE 1-C

—CH_2—CH_2—O—D1

—O—CH_2—CH_2—O—$(CH_2)_{11}$—Me

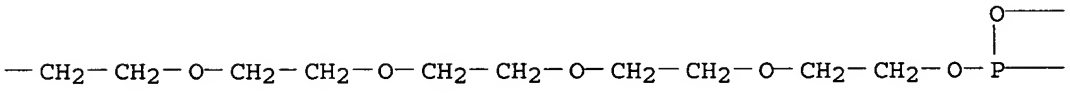
RN 42605-27-6 CAPLUS
CN Phosphorous acid, (methylenediphenylene)bis(oxy-3,6,9,12,15,18,21,24,27-nonaoxanonacosane-29,1-diyl) bis(29-phenoxy-3,6,9,12,15,18,21,24,27-nonaoxanonacos-1-yl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

1/2 [D1—CH_2—D1]

PhO—CH_2—CH_2—O—CH_2—CH_2—O—CH_2—CH_2—O—CH_2—CH_2—O—CH_2—CH_2—O——

PAGE 1-B



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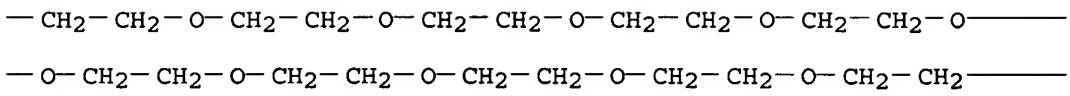

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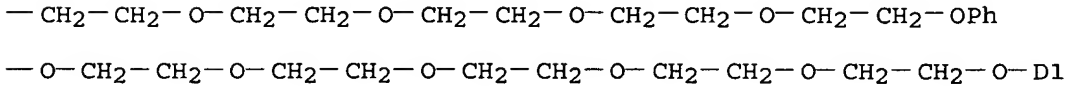


L57 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1973:125196 CAPLUS
DOCUMENT NUMBER: 78:125196
TITLE: Olefin polymerization catalyst
INVENTOR(S): Caunt, Anthony David
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: Ger. Offen., 38 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2234506	A1	19730201	DE 1972-2234506	19720713
GB 1383207	A	19750205	GB 1971-32856	19720630
AU 7244267	A1	19740110	AU 1972-44267	19720705
IT 972157	A	19740520	IT 1972-26862	19720711

FR 2145609	A1	19730223	FR 1972-25190		19720712
NL 7209681	A	19730116	NL 1972-9681		19720713
JP 48026884	A2	19730409	JP 1972-69607		19720713
US 3940345	A	19760224	US 1973-367002		19730604
US 3969269	A	19760713	US 1974-475840		19740603
PRIORITY APPLN. INFO.:			GB 1971-32856	A	19710713
			GB 1972-27010	A	19720609
			US 1972-268505	A2	19720703
			GB 1973-7987	A	19730219

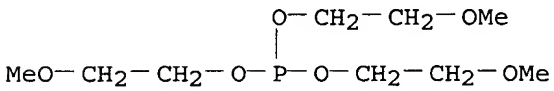
ED Entered STN: 12 May 1984

AB PCl3, P(NMe2)3, or P(OEt)3 reacted with alcs. containing amine or ether groups to give 8 P-containing compds. that when used with TiCl3-Et3Al or TiCl3-Ph3PO mixts. catalyzed the polymerization of propylene at a high rate to give polypropylene (I) [9003-07-0] containing reduced amts. of soluble matter. Thus, 27 mmol P(NMe2)3 and 54 N,N-dimethylethanolamine were heated at 100.deg. under Ar until 55.5 mmole Me2N was produced, and the reaction mixture fractionated in vacuo to give 6.2 mmole tris[2-(dimethylamino)ethyl]phosphite (II) [39670-03-6] and 8.7 mmole bis[2-(dimethylamino)ethyloxy]dimethylaminophosphorus (III) [39670-04-7]. Mixts. containing II and III, Et3Al, and TiCl3 (prepared by Et3Al-reduction of TiCl4) catalyzed the preparation of I at a conversion of 26.5-39 g/mmole Ti (based on solid I) with 11-13.5% soluble matter compared with 22.5-35 g/mmole Ti and 29-30.5% when no P compound was used and 5 g/mmole Ti and 30% when P(NMe2)3 was used as the 3rd component.

IT **4156-80-3**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for polymerization of propylene)

RN 4156-80-3 CAPLUS

CN Ethanol, 2-methoxy-, phosphite (3:1) (8CI, 9CI) (CA INDEX NAME)



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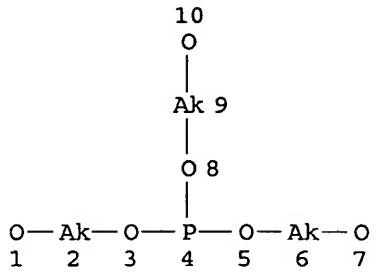

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CONNECT IS E3 RC AT 4
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DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 2
ECOUNT IS M2 C AT 6
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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
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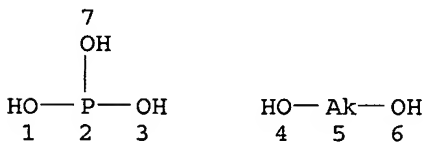

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CONNECT IS E3 RC AT 2
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 5

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.09

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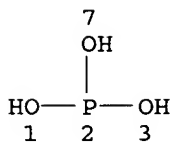

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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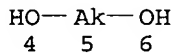
STEREO ATTRIBUTES: NONE
L14 STR



NODE ATTRIBUTES:
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2 C AT 5

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
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SEARCH TIME: 00.00.01

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E US2004-810404/AP,PRN 25
SET NOTICE 1000 SEARCH
L1 1 SEA ABB=ON US2004-810404/AP
SET NOTICE LOGIN SEARCH
SET LINE LOGIN
SET DETAIL LOGIN
D SCAN
SEL RN

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                25038-59-9/BI OR 761-55-7/BI OR 865710-66-3/BI OR 865710-69-6/B
                I OR 865710-71-0/BI OR 865710-73-2/BI OR 865710-75-4/BI OR
                865710-77-6/BI OR 865710-78-7/BI OR 865710-79-8/BI OR 865762-95
                -4/BI OR 865762-96-5/BI OR 93481-28-8/BI)
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     FILE 'REGISTRY' ENTERED AT 10:42:21 ON 21 JUN 2006
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                D SCAN
L5              STR L3
L6            1 SEA SSS SAM L5
                D SCAN
L7              STR
L8            0 SEA SSS SAM L7
L9            0 SEA SSS SAM L5 OR L7
                D QUE
L10         196 SEA SSS FUL L5 OR L7
                SAVE TEMP L10 SHI404FULL/A
L11          11 SEA ABB=ON  L2 AND L10
L12           5 SEA ABB=ON  L2 NOT L10
                D SCAN
                D QUE L7
L13             STR L7
L14             STR L7
L15           5 SEA FAM SAM L13
L16           5 SEA SSS SAM L14
L17             SCREEN 1701
L18          50 SEA SSS SAM L14 AND L17
L19         150 SEA FAM FUL L13
                SAVE TEMP L19 SHI404FAM1/A
L20           1 SEA SUB=L19 SSS SAM L14
                D SCAN
L21           9 SEA SUB=L19 SSS FUL L14
                SAVE TEMP L21 SHI404SUB1/A
L22           2 SEA ABB=ON  L21 AND L12
L23         202 SEA ABB=ON  L10/COMPLETE OR L21/COMPLETE
                SAVE TEMP L23 SHI404SUB2/A

     FILE 'CAPLUS' ENTERED AT 10:53:58 ON 21 JUN 2006
L24         249 SEA ABB=ON  L23

     FILE 'REGISTRY' ENTERED AT 10:54:05 ON 21 JUN 2006
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                D SCAN
                D SCAN L2

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L26           2 SEA ABB=ON  ("TETRAISOPROPYL TITANATE"/CN OR "TETRAISOPROPYL
                TITANATE HOMOPOLYMER"/CN)
                E TETRA N-BUTYL TITANATE/CN
                E TETRAN-BUTYL TITANATE/CN
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                E "TETRA(N-BUTYL) TITANATE"/CN
                E "TETRA (N-BUTYL) TITANATE"/CN
                E "TETRABUTYL TITANATE"/CN
L27           5 SEA ABB=ON  ("TETRABUTYL TITANATE"/CN OR "TETRABUTYL TITANATE
                DECAMER"/CN OR "TETRABUTYL TITANATE DIMER"/CN OR "TETRABUTYL
                TITANATE POLYMER"/CN OR "TETRABUTYL TITANATE TETRAMER"/CN)

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L29           1 SEA ABB=ON  L24 AND L28
                D SCAN
L30      560959 SEA ABB=ON  TITAN?/OBI
L31           4 SEA ABB=ON  L24 AND L30

     FILE 'REGISTRY' ENTERED AT 11:05:06 ON 21 JUN 2006
L32           8 SEA ABB=ON  L21/COMPLETE

     FILE 'CAPLUS' ENTERED AT 11:05:11 ON 21 JUN 2006
L33          14 SEA ABB=ON  L32

     FILE 'REGISTRY' ENTERED AT 11:05:32 ON 21 JUN 2006
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L34         115 SEA ABB=ON  L10 AND (C H O P/ELF AND 4/ELC.SUB)
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     FILE 'CAPLUS' ENTERED AT 11:06:25 ON 21 JUN 2006
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L36         128 SEA ABB=ON  L35 NOT PRY>2002
                D SCAN L1
L37           1 SEA ABB=ON  L35 AND L1
                D SCAN
                E POLYESTERS+NT/CT
                E 1/SC

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L40     1265404 SEA ABB=ON  POLYMER#/OBI
L41          45 SEA ABB=ON  L40 AND L35
L42          30 SEA ABB=ON  L41 NOT ((L29 OR L31 OR L38 OR L39 OR L33))
L43      953505 SEA ABB=ON  PLASTICS?/SC,SX
L44          52 SEA ABB=ON  L35 AND L43
L45           5 SEA ABB=ON  L44 NOT (L38 OR L39 OR L40)
L46     1265372 SEA ABB=ON  (L38 OR L39 OR L40) NOT L44
L47          13 SEA ABB=ON  (L38 OR L39 OR L41) NOT L44
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L48           1 SEA ABB=ON  L47 AND ORGANOMETALLIC/TI
                D SCAN
L49     2515689 SEA ABB=ON  ?METAL?/BI
L50          25 SEA ABB=ON  (L38 OR L39) AND L36
L51          62 SEA ABB=ON  (L40 OR L43) AND L36
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L54      124470 SEA ABB=ON  L2
L55           3 SEA ABB=ON  L54 AND L51
L56           4 SEA ABB=ON  (L40 OR L43) AND L35 AND L54

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                D IBIB ED ABS HITSTR L33 1-14

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      FILE 'CAPLUS' ENTERED AT 11:28:21 ON 21 JUN 2006
                D QUE NOS L29
                D QUE NOS L31
                D QUE NOS L53
                D QUE NOS L56
L57           14 SEA ABB=ON  (L29 OR L31 OR L53 OR L56) NOT L33
                D IBIB ED ABS HITSTR L57 1-14

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      FILE 'REGISTRY' ENTERED AT 11:29:18 ON 21 JUN 2006
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      FILE 'CAPLUS' ENTERED AT 11:29:18 ON 21 JUN 2006
                D QUE NOS L29
                D QUE NOS L31
                D QUE NOS L53
                D QUE NOS L56
                D STAT QUE L10
                D STAT QUE L21

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